

## AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

### **LISTING OF CLAIMS**

1-24. (canceled)

25. (currently amended) ~~A computer for modeling costs associated with a complex physical system having a plurality of cost-incurring operations associated with the system, the computer comprising: a memory to store a tree structure in which each of a plurality of nodes is used to represent an operation associated with the system, the tree structure including: a first node representing a first operation associated with the system; a second node representing a second operation associated with the system; and a first branch between the first node and the second node representing a dependency of the second operation on the first operation; a processor configured to determine whether a second branch between the first node and a third node represents a dependency of the first operation on a third operation represented by the third node, and based on the determining, reduce one or more costs associated with the second and third nodes; and a graphical user interface configured to display the reduced costs~~

An apparatus for facilitating the management of costs associated with performing a plurality of processes to manufacture, service and/or maintain an aerospace system incorporating a plurality of physical components, the apparatus comprising a processor and memory configured to:

represent each process as a set of performable operations;  
associate each operation with a cost of performing the operation;  
receive a user selection of an operation performable in a first of the processes;  
determine whether the selected operation is a duplicate of another operation  
performable in the first process and/or performable in a second of the processes; and  
based on the determination, notify the user as to a possible reduction of costs by  
elimination of a duplicate performance of the selected operation.

26. (currently amended) ~~The computer according to Claim 25, wherein the processor to further determine whether a fourth node represents the first operation.~~

The apparatus of claim 25, wherein the processor and memory are configured to:

identify one or more operations dependent on performance of the selected operation; and

notify the user as to costs associated with the identified dependent operations.

27. (new) The apparatus of claim 25, wherein the processor and memory are configured to:

identify a mandatory operation performable downstream of the selected operation; and

notify the user as to costs associated with the mandatory operation.

28. (new) The apparatus of claim 25, wherein the processor and memory are configured to modify a representation of one or more of the processes based on user input.

29. (new) The apparatus of claim 25, wherein the processor and memory are configured to combine representations of two or more processes based on user input.

30. (new) The apparatus of claim 25, wherein the aerospace system comprises an aerospace vehicle.

31. (new) The apparatus of claim 25, wherein the processor and memory are configured to identify one or more locations for performing the selected operation.

32. (new) The apparatus of claim 25, wherein the processor and memory are further configured to represent each process as a set of sequential operations.

33. (new) A processor-performed method of facilitating the management of costs associated with performing a plurality of processes to manufacture, service and/or maintain an aerospace system incorporating a plurality of physical components, the method comprising:

representing each process as a set of sequential operations;

receiving from a user a selection of one of the operations of a first of the processes;

determining whether the selected operation is performable as part of a second of the processes;

based on the determining, notifying the user as to a feasibility of combining performances of the first and second processes.

34. (new) The method of claim 33, further comprising:  
using costs for performing each of the operations of the first process to obtain a cost for performing the first process; and  
providing at least one of the costs to the user.

35. (new) The method of claim 33, further comprising:  
modifying a representation of the selected operation based on user input; and  
based on the modifying, changing a cost associated with performance of the selected operation.

36. (new) The method of claim 33, further comprising modifying a representation of a set of operations that includes the selected operation, the modifying performed based on input from the user.

37. (new) The method of claim 36, further comprising, based on the modifying, changing a cost associated with the set of operations.

38. (new) A processor-performed method of facilitating the management of costs associated with performing a plurality of processes to manufacture, service and/or maintain an aerospace system incorporating a plurality of physical components, the method comprising:

representing each process as a set of sequential operations;

receiving from a user a selection of one of the operations of a first of the processes;

determining whether the first process is a first sub-process of a second process, and whether the selected operation is duplicated in a second sub-process of the second process; and

based on the determining, notifying the user as to a feasibility of combining performances of the sub-processes.

39. (new) The method of claim 38, further comprising:

identifying one or more operations dependent on performance of the selected operation; and

notifying the user as to costs associated with the identified dependent operations.

40. (new) The method of claim 38, further comprising:

identifying a mandatory operation performable downstream of the selected operation; and

notifying the user as to costs associated with the mandatory operation.

41. (new) The method of claim 38, further comprising modifying a representation of one or more of the processes based on user input.

42. (new) The method of claim 38, further comprising combining representations of two or more processes based on user input.

43. (new) The method of claim 38, wherein the aerospace system comprises an aerospace vehicle.

44. (new) The method of claim 38, further comprising identifying one or more locations for performing the selected operation.